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Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for purifying water, wherein the water contains both (i) ionizable and/or ionized organic carbon compounds and (ii) non-ionized and/or non-ionizable organic carbon compounds, such method comprising the steps of:
 - (a) processing a first stream of the water with a deionization apparatus to remove from the water ionized organic carbon compounds and certain organic compounds that are ionizable in said deionization apparatus, wherein at least some of such ionized and/or the certain ionizable organic carbon compounds are susceptible to conversion to non-ionized and/or non-ionizable organic carbon compounds by an agent intended for converting non-ionized and/or non-ionizable organic compounds into ionized and/or ionizable organic compounds, thereby producing a first product stream containing a smaller concentration of ionized and/or ionizable organic carbon compounds including the certain organic compounds, than the first stream;
 - (b) immediately following step (a), contacting the first product stream with said agent for converting non-ionized and/or non-ionizable organic carbon compounds into ionized and/or ionizable organic carbon compounds at a time and a temperature sufficient to form a second product stream containing a smaller concentration of non-ionized and/or non-ionizable organic carbon compounds than the first stream and a larger concentration of ionized and/or ionizable organic carbon compounds than the first product stream;
 - (c) processing the second product stream with a second deionization apparatus, which differs from said first deionization apparatus, for removing ionized and/or ionizable organic carbon compounds from the water to form a third product stream containing a smaller concentration of ionized and/or ionizable organic carbon compounds and of non-ionized and/or non-ionizable organic carbon compounds than the first stream; and

- (d) recovering the third product stream from step (c), wherein ~~at least one~~ each of said first deionization apparatus and said second deionization apparatus is selected from the group consisting of ~~electrically regenerated ion exchange apparatus;~~ electrodeionization apparatus, electrodialysis apparatus, filled cell electrodialysis apparatus and electrodiuresis apparatus.
2. (Canceled) A method according to claim 1 including a recirculating flow loop and wherein the first removal deionization apparatus comprises the second deionization apparatus.
3. (Canceled) A method according to claim 1 wherein one of said first deionization apparatus and said second deionization apparatus is selected from the group consisting of electrically regenerated ion exchange apparatus, electrodeionization apparatus, electrodialysis apparatus, filled cell electrodialysis apparatus, filled cell electrodialysis apparatus and electrodiuresis apparatus, and one of said first deionization apparatus and said second deionization apparatus is selected from the group consisting of reverse osmosis apparatus, nanofiltration apparatus, chemically regenerated ion exchange apparatus, activated carbon apparatus and other sorbent apparatus.
4. (Original) A method according to claim 1, wherein the agent is selected from the group consisting of an oxygen, ozone, singlet oxygen, hydrogen peroxide, chemical oxidizing agent, electrolytic oxidizing agent, electrochemical oxidizing agent, catalytic oxidizing agent, thermal oxidizing agent, and radiation and combinations thereof.
5. (Previously amended) A method according to claim 4 wherein the agent comprises radiation characterized by wavelengths of about 184.9 nm.
6. (Original) A method according to claim 1 wherein the agent comprises ultraviolet radiation.
7. (Original) A method according to claim 6 wherein the agent further comprises hydrogen

peroxide.

8. (Currently amended) A method according to claim 6 wherein the agent further comprises ~~a catalyst~~ ozone.
9. (Original) A method according to claim 6 wherein the agent further comprises a catalyst.
10. (Original) A method according to claim 9 wherein the catalyst comprises titanium oxide.
11. (Original) A method according to claim 1 wherein the agent comprises ozone and hydrogen peroxide.
12. (Currently amended) An apparatus for purifying water, wherein the water contains both (i) ionizable and/or ionized organic carbon compounds and (ii) non-ionized and/or non-ionizable organic carbon compounds from water comprising:
 - (a) a first deionization apparatus means to remove from the water ionized organic carbon compounds and certain organic compounds that are ionizable in said deionization apparatus, wherein at least some of such ionized and/or the certain ionizable organic carbon compounds are susceptible to conversion to non-ionized and/or non-ionizable organic carbon compounds by a conversion means intended for converting non-ionized and/or non-ionizable organic carbon compounds into ionized and/or ionizable organic carbon compounds, thereby producing a first product stream containing a smaller concentration of ionized and/or ionizable organic carbon compounds including the certain organic compounds, than the first stream;
 - (b) a conversion means for converting non-ionized and/or non-ionizable organic carbon compounds into ionized and/or ionizable organic carbon compounds at a time and a temperature sufficient to form a second product stream containing a smaller concentration of non-ionized and/or non-ionizable organic carbon compounds than the first stream and a larger concentration of ionized and/or ionizable organic carbon compounds than the first product stream, wherein said conversion means is positioned immediately following the deionization apparatus in (a);

- (c) a second deionization means, which differs from said first deionization means, for removing ionized and/or ionizable carbon compounds from the water to form a third product stream containing a smaller concentration of ionized and/or ionizable organic carbon compounds and of non-ionized and/or non-ionizable organic carbon compounds than the first stream; and
- (d) a recovery means for recovering the third product stream;
- wherein ~~at least one~~ each of said first deionization means and said second deionization means is selected from the group consisting of ~~electrically regenerated ion exchange apparatus~~, electrodeionization apparatus, electrodialysis apparatus, filled cell electrodialysis apparatus and electrodiuresis apparatus.
13. (Canceled) An apparatus according to claim 12 including a recirculating flow loop and wherein the first removal deionization apparatus comprises the second deionization apparatus.
14. (Canceled) An apparatus according to claim 12 wherein one of said first deionization means and said second deionization means is selected from the group consisting of electrically regenerated ion exchange apparatus, electrodeionization apparatus, electrodialysis apparatus, filled cell electrodialysis apparatus and electrodiuresis apparatus and one of said first deionization means and said second deionization means is selected from the group consisting of reverse osmosis apparatus, nanofiltrative apparatus, chemically regenerated ion exchange apparatus, activated carbon apparatus and other sorbent apparatus
15. (Original) An apparatus according to claim 12 wherein the conversion means comprises contact means for contacting the first product stream with an agent.
16. (Original) An apparatus according to claim 15 wherein the agent is selected from the group consisting of a oxygen, ozone, singlet oxygen, hydrogen peroxide, chemical oxidizing agent, electrolytic oxidizing agent, electrochemical oxidizing agent, catalytic oxidizing agent, thermal oxidizing agent, and radiation.

17. (Original) An apparatus according to claim 16 wherein the oxidizing agent comprises radiation characterized by wavelengths of about 184.9 nm.
18. (Original) An apparatus according to claim 16 wherein the oxidizing agent comprises ultraviolet radiation.
19. (Original) An apparatus according to claim 18 wherein the agent further comprises hydrogen peroxide.
20. (Original) An apparatus according to claim 18 wherein the agent further comprises ozone.
21. (Original) An apparatus according to claim 20 wherein the agent further comprises a catalyst.
22. (Original) An apparatus according to claim 16 wherein the catalyst comprises titanium oxide.
23. (Original) An apparatus according to claim 15 wherein the agent comprises ozone and hydrogen peroxide.